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28-FOOT GREENHOUSE



The original design for this greenhouse was developed by an agricultural engineer at Pennsylvania State University.

The objective was to design a commercial-sized greenhouse structure that would provide optional construction systems that could be grower built. This greenhouse is designed for either pot or flat systems.

The plan is applicable to most of the United States. In many areas some modification of the structure and the environmental control devices may be required.

This structure is designed for total roofload of 25 psf or a windload of 20 psf perpendicular to one side. Appropriate shape coefficients were used to determine wind loading on the several surfaces. No cropload is assumed to be transferred to the structural frame.

This plan includes heating and cooling recommendations and suggested bench layout for an operation in the Mid-Atlantic or Great Lakes geographic area.

Sheet 1 of the working drawings shows plan layout, including heating and cooling, and cross section of one

construction option. Sheet 2 shows the alternate truss designs, and sheet 3 shows construction options in the selection of column detail of steel construction with insulation, steel frame with film cover and no insulation, or steel frame with rigid fiberglass without insulation.

To reduce the initial cost, the house may be covered with plastic film for a season or two; later, for a longer lasting cover, rigid plastic panels may be applied. In either case, it is important to follow the manufacturer's directions for installing the plastic.

Complete working drawings may be obtained from the Extension agricultural engineer at your State university. There may be a small charge to cover cost of printing.

If you do not know the location of your State university, send your request to Agricultural Engineer, Extension Service, U.S. Department of Agriculture, Washington, D.C. 20250. He will forward your request to the correct university.

ORDER PLAN NO. 6185, 28-FOOT GREENHOUSE.

Washington, D.C.

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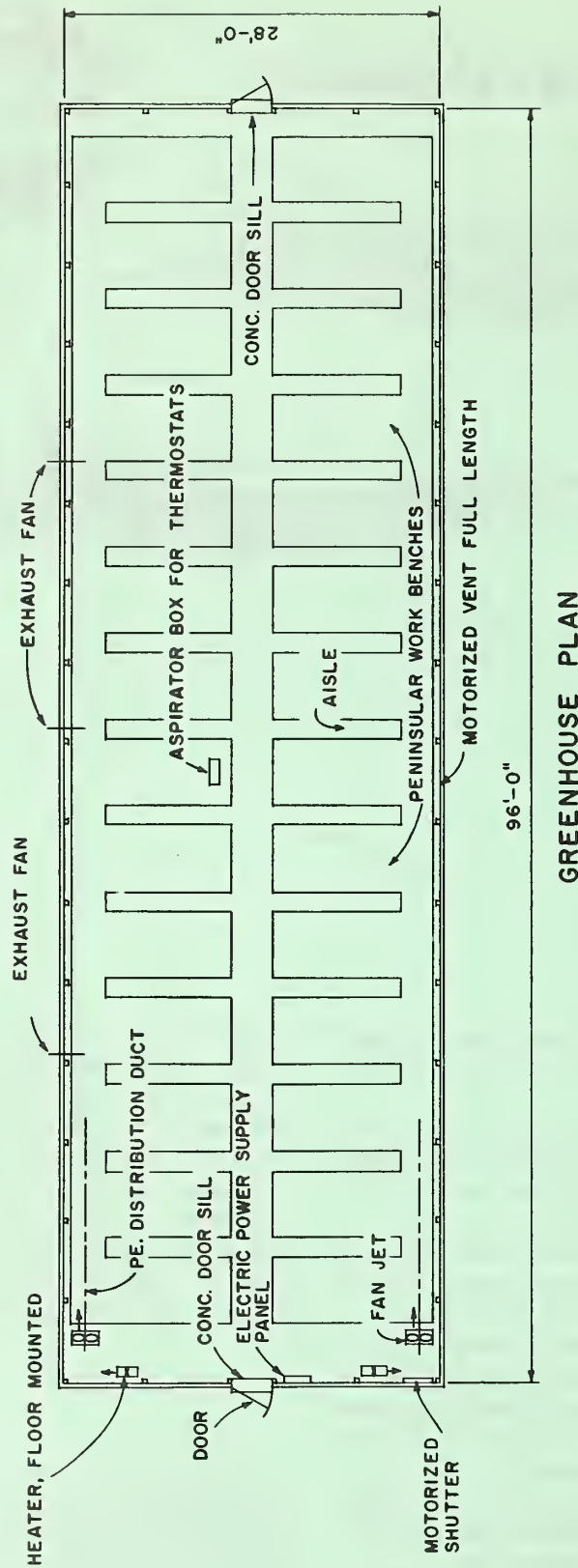
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